

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002718**Date Inspected:** 29-May-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Lu Jiang Hua**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower and OBG**Summary of Items Observed:**

CALTRANS Quality Assurance (QA) Inspector, Alfredo Acuna was present for the fabrication scheduled for this project at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

Tower Skin Plates

The QA inspector performed ultrasonic testing (UT) at the completed joint penetration at the skin plates splices weld joints # SSD1 SA-179 B/E-3A, SSD1 SA-179 B/E-2A, SSD1-SA173 J/K-7A, SSD1-SA173 K/K 14A, SSD1-SA-17 A/G 15B. The QA inspector performed 10 % UT at random locations. The QA inspector found that welds areas tested appeared to be in compliance with the contract documents. See UT report TL_6027 generated on this date.

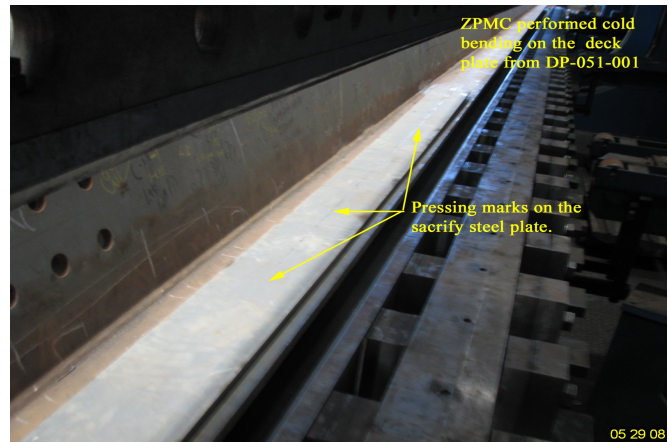
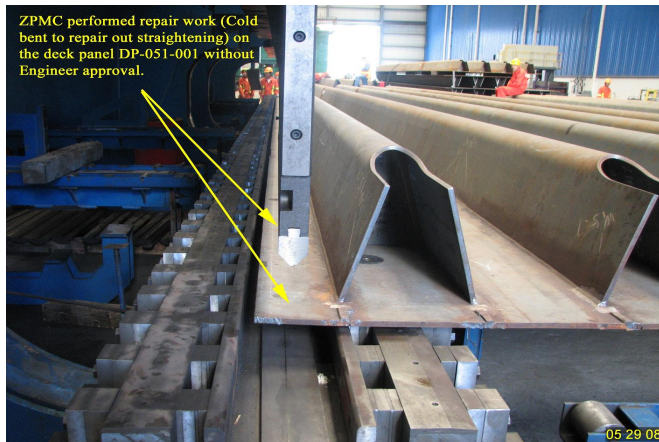
The QA inspector performed magnetic particle testing (MT) at the end of the skin plates connections SSD1-SA179 B/E-3A, SSD1-SA-173 K/K-14A and ESD1-SA-233 A/F-21A for information purposed. Weld terminations appeared to be in compliance with the contract documents. The weld joint ESD1-SA-233 A/F-21A was re-evaluated after finding a relevant indication on 05/28/2008.

The QA inspector had a conversation with the ABF representative Kevin Chen on Bay # 3 by Tower assembly shop; The QA inspector asked why ZPMC was performing cold bending with the 1600 Tons press on the deck panel DP-051-001. Mr. Kevin Chen informed that ZPMC stated that by section 3.7.3 from the AWS D1.5 (2002) ZPMC does not require the approval of the Engineer. The QA inspector had a conversation with Caltrans Task Leader Robert Cuellar. Mr. Robert Cuellar informed to the QA inspector that ZPMC requires to notify the Engineer before mechanical straightening to repair welding distortion. The QA inspector had a conversation with

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ABF representative Warren Buehler and ZPMC representative Lu Jiang Hua. The QA inspector informed that the department was going to issue an incident report because ZPMC performed repair work (mechanical straightening) with the means and methods that have not been approved by the Engineer. Later, Mr. Lu Jiang Hua informed to the QA inspector that ZPMC was not going to proceed the mechanical straightening the deck panel DP-051-001. In addition, he said that ZPMC never started straightening the panel DP-051-001. The QA inspector observed marks over of a steel plate after being pressurized by the press and asked Mr. Warren Buehler if ZPMC actually started the straightening of the deck plate because Mr. Lu Jiang Hua said that ZPMC did not start the repair work. Mr. Warren Buehler confirmed that ZPMC did start cold bending with the 1600 Tons press on this date. Mr. Warren Buehler questioned the inaccuracy of Mr. Lu Jiang Hua previous statement regarding ZPMC never starting the cold bending operations with the press. The digital photograph below shows the panel DP-051-001 on the table by the press and the marks over a steel plate that was pressurized by the press.



Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By: Acuna,Alfredo

Quality Assurance Inspector

Reviewed By: Cuellar,Robert

QA Reviewer